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| APPLICATION NO. FILING DATE |                    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|-----------------------------|--------------------|----------------------|-------------------------|------------------|--|
| 10/716,643                  | 11/19/2003         | David Hall           | P-B088 · 6444           |                  |  |
| 75                          | 90 07/11/2006      |                      | EXAMINER                |                  |  |
| W. Thomas Timmons           |                    |                      | AN, SANG WOOK           |                  |  |
| The White Hou               | se on Turtle Creek |                      |                         |                  |  |
| 2401 Turtle Cre             | ek Blvd.           | ART UNIT             | PAPER NUMBER            |                  |  |
| Dallas, TX 75               | 219-4760           | 1732                 |                         |                  |  |
|                             |                    |                      | DATE MAILED: 07/11/2006 |                  |  |
|                             |                    |                      |                         |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |   |   |   |   |  | ,            |  |  |  |
|---|---|---|---|---|--|--------------|--|--|--|
|   |   |   | Application No.   |   | Applicant(s)   |              |  |  |  |
| Office Action Summary   |   | 10/716,643  |   | HALL, DAVID   |  |              |  |  |  |
|   |   | Examiner  |   | Art Unit  |  |              |  |  |  |
|   |   |   | Sang W. An  |   | 1732   |              |  |  |  |
| The MA<br>Period for Reply  | AILING DATE of this commu   | nication appe   | ears on the cove  | r sheet with the c  | orrespondence ad   | ldress       |  |  |  |
| WHICHEVER - Extensions of time after SIX (6) MON - If NO period for reply we have reply receive   | ED STATUTORY PERIOD I<br>IS LONGER, FROM THE IN<br>e may be available under the provision<br>ATHS from the mailing date of this come<br>ply is specified above, the maximum so<br>tithin the set or extended period for repl<br>d by the Office later than three months<br>m adjustment. See 37 CFR 1.704(b).                     | MAILING DA<br>s of 37 CFR 1.136<br>munication.<br>statutory period will<br>y will, by statute, of | TE OF THIS CO<br>6(a). In no event, how<br>ill apply and will expire<br>cause the application t | OMMUNICATION ever, may a reply be tim SIX (6) MONTHS from o become ABANDONE | N.<br>nely filed<br>the mailing date of this c<br>D (35 U.S.C. § 133). |              |  |  |  |
| Status  |   |   |   |   |  |              |  |  |  |
| 1) Respons  | sive to communication(s) fil  | ed on   | _•  |   |  |              |  |  |  |
| •   | This action is <b>FINAL</b> . 2b) ☐ This action is non-final.   |   |   |   |  |              |  |  |  |
| •   | ,   |   |   |   |  |              |  |  |  |
| Disposition of CI   | aims  |   |   |   |  |              |  |  |  |
| 4a) Of th<br>5)   | 4)  Claim(s) 1-23 is/are pending in the application.  4a) Of the above claim(s) 7,12,16 and 23 is/are withdrawn from consideration.  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-6,8-11,13-15 and 17-22 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or election requirement. |   |   |   |  |              |  |  |  |
| Application Pape  | ers   |   |   |   |  |              |  |  |  |
| 10)⊠ The drav<br>Applican<br>Replacer   | cification is objected to by the ving(s) filed on 19 November to may not request that any objected for declaration is objected to   | e <u>r 2003</u> is/are<br>ection to the d<br>g the correction                                     | e: a)⊠ accepte<br>Irawing(s) be held<br>on is required if th                                    | in abeyance. See<br>e drawing(s) is ob                                      | e 37 CFR 1.85(a).<br>jected to. See 37 Cl                              | FR 1.121(d). |  |  |  |
| Priority under 35   | U.S.C. § 119  |   |   |   |  |              |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |   |   |   |   |  |              |  |  |  |
| Attachment(s)  1) Notice of Refere  | ences Cited (PTO-892)   |   | 4) 🗌  | Interview Summary   | (PTO-413)  |              |  |  |  |
| 2) Notice of Drafts   | person's Patent Drawing Review (<br>closure Statement(s) (PTO-1449 o  |   |   | Paper No(s)/Mail Da   |  | O-152)       |  |  |  |

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## **DETAILED ACTION**

## Election/Restrictions

- 1. Applicant's election with traverse of Group I, claims 1-6, 8-11, 13-15, and 17-22, in the reply filed on 5/9/2006 is acknowledged. The traversal is on the ground(s) that claims of Group II are product-by-process claims, which cannot stand on their own. This is not found persuasive because even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production and only the structure implied by the process steps is considered when assessing the patentability of product-by-process. Therefore, as shown forth in the previous office action, the process and product belong in two distinct classes putting undue burden on the examiner's search efforts. The requirement is still deemed proper and is therefore made FINAL.
- 2. Claims 7, 12, 16, and 23 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 5/9/2006.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1, 13-15, and 17-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmidt (US 5217655).

Regarding claim 1, Schmidt teaches shredding the scrap carpet (Col 4 Line 2); grinding the shredded carpet (Col 4 Line 7-10); heating the grinded carpet to a first predetermined temperature range (Col 3 Line 54-56); heating the grinded carpet to a second predetermined temperature range which is higher than the first predetermined temperature range (Col 3 Line 56-58); and heating the grinded carpet to a third predetermined temperature range which is higher than the second predetermined temperature range (Col 3 Line 59-61) and extruding the heated carpet (col 3 lines 62-65).

As to claim 13, Schmidt teaches grinding the shredded carpet comprises grinding the shredded carpet to pass through a one half inch screen and grinding the carpet a second time to pass through a screen of from about one fourth inch to about three eighths inch (Col 4 Line 10-18).

As to claim 14, Schmidt teaches a carpet that has been substantially melted from heating, further including: extruding the melted carpet into a mold (Col 6 Line 59-69); and cooling the mold and the extruded melted carpet (Col 7 Line 14-17).

As to claim 15, Schmidt teaches cooling the mold and the extruded melted carpet comprises placing the mold into water and circulating the water (Col 7 Line 14-17).

As to claim 17, Schmidt teaches shredding the scrap carpet (Col 4 Line 2); grinding the shredded carpet in a plurality of grinding stages (Col 4 Line 7-10); heating the grinded carpet in a plurality of heating stages, wherein each succeeding heating

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stage heats the grinded carpet to a higher predetermined temperature range (Col 3 Lines 54-61) and extruding the heated carpet (col 3 lines 62-65).

As to claim 18, Schmidt teaches grinding the shredded carpet comprises grinding the shredded carpet to pass through a one half inch screen and grinding the carpet a second time to pass through a screen of from about one fourth inch to about three eighths inch (Col 4 Line 10-18).

As to claim 19, Schmidt teaches a carpet that has been substantially melted from heating, further including: extruding the melted carpet into a mold; and cooling the mold and the extruded melted carpet (Col 7 Line 14-17).

As to claim 20, Schmidt teaches cooling the mold and the extruded melted carpet comprises placing the mold into water and circulating the water (Col 7 Line 14-17).

As to claim 21 and 22, Schmidt teaches a plurality of grinding stages that comprises a first grinding stage and a second grinding stage (Col 4 Line 10-18) and wherein the plurality of heating stages comprises at least three heating stages (Col 54-61).

## Claim Rejections - 35 USC § 103

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 2-6 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt.

water (Col 7 Line 14-17).

Schmidt teaches everything mentioned above in the 102(b) rejection.

Furthermore, regarding claims 4 and 9, Schmidt teaches grinding the shredded carpet comprises grinding the shredded carpet to pass through a one half inch screen and grinding the carpet a second time to pass through a screen of from about one fourth inch to about three eighths inch (Col 4 Line 10-18). As to claim 5 and 10, Schmidt teaches the carpet has been substantially melted from heating, further including:

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extruding the melted carpet into a mold; and cooling the mold and the extruded melted carpet (Col 7 Line 14-17). As to claim 6 and 11, Schmidt teaches cooling the mold and the extended melted carpet comprises placing the mold into water and circulating the

As to claim 2,3, and 8, Schmidt explicitly teaches the first three heating stages wherein, the first predetermined temperature range is from about 205 to about 255 (claim 3) or about 225 to about 245 (claim 8) degrees Fahrenheit (Col 3 Line 54-56), the second predetermined temperature range is from about 275 to about 310 (claim 3) or about 285 to about 305 (claim 8) degrees Fahrenheit (Col 3 Line 56-58), the third temperature range is from about 340 to about 385 (claim 3) or 360 to about 380 (claim 8) degrees Fahrenheit (Col 3 Line 59-61). However, Schmidt is silent about heating the grinded carpet to a fourth predetermined temperature range which is higher than the third predetermined temperature range; and heating the grinded carpet to a fifth predetermined temperature range which is higher than the fourth predetermined temperature range.

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Nevertheless, Schmidt does suggest modifying the heating schedule (such as heating time) depending upon the specific profile of the intake material being processed and the properties of the materials (Col 4 Line 59-63). For example, certain carpet materials may need more heating time or higher temperature to achieve melting (Col 4 Line 54-56). Schmidt's recognition that the heating schedule may be tailored to the particular carpet feed indicates that Schmidt recognized the heat parameters as being process control variables. As such, one of ordinary skill in the art would use Schmidt's teaching to readily optimize the heating schedule to include any number of heating stages, such as five. See In re Boesch (617 F.2d 272, 205 USPQ 215, CCPA 1980). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to optimize Schmidt's teaching of modifying heating schedule in the process for producing a lumber type product from scrap carpet in order to accommodate for the specific profile and properties of the intake material such as higher melting temperature (Schmidt, Col 4 Line 59-63).

# Response to Argument

The applicant has amended claim 22 to depend from claim 19. The objection has been withdrawn.

The applicant has amended claim 1 to include a step of extruding. 35 U.S.C. § 112 rejection has been withdrawn.

Applicant's arguments see pages 6-7, filed 5/9/2006, have been fully considered but they are not persuasive. The transitional phrase "consists essentially of" limits the scope of the claim to the specified materials or steps "and those that do not materially

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affect the basic and novel characteristics" of the claimed invention. *In re Herz*, 537 F.2d549, 551-52, 190 USPQ 461, 463 (CCPA 1976). For search and examination purposed, absent a clear indication in the specification of what the basic and novel characteristics actually are, "consists essentially of" will be construed as equivalent to "comprising." When an applicant contends that additional steps or materials in the prior art are excluded by the recitation "consists essentially of," applicant has the burden of showing that the introduction of additional steps or components would materially change the characteristics of applicant's invention. *In re De Lajarte*, 337 F.2d 870, 143 USPQ 256 (CCPA 1964). See also *Ex parte Hoffman*, 12 USPQ2d 1061, 1063-64 (Bd. Pat. App & Inter. 1989).

Because no evidence has been set forth on the record to show that Schmidt's many fibers would materially affect the basic and novel characteristics of the instantly claimed invention, the rejections of claims 1 and 17 are maintained.

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sang W. An whose telephone number is (571) 272-1997. The examiner can normally be reached on Mon-Fri 7 AM - 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sang W. An Patent Examiner
Art Unit 1732
December 15, 2005

CHRISTINA JOHNSON PRIMARY EXAMINER